

## KATRA\* : THE SITE OF AN ANCIENT TOWN\*\*

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About one thousand years after the disappearance of the Indus cities, the second phase of urbanization in India began in the sixth century B. C. It was really a period of sound urbanization particularly for north India. The period witnessed innovations in social structure and religious thoughts as well as material changes of far-reaching consequences. From this time onwards we come across a definite system of coinage which promoted organized commerce, arterial roads (without any significant change in the means of transport except iron components implied as the substitute for copper-bronze in the cart), baked bricks (reappeared after the fall of the Harappan cities in the form of habitational buildings and fortifications), the system of writing (although the standardization took place from Mauryan times), and the introduction of a distinctive ceramic industry—the Northern Black Polished Ware, evolving comparatively a new technique of imparting a lustrous surface.<sup>1</sup> Besides, the advent of iron revolutionized the economy of the people in agriculture, transport, trade and in the promotion of civic life. Under these favourable circumstances the transformation of the incipient headquarters of *janapadas* into cities also took place. By this time these material changes brought about many changes in the socio-economic life of the people in various parts of India. According to one estimate, there were almost sixty towns and cities in the whole country.<sup>2</sup>

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\* Katra is situated at a distance of about 60 kilometres north-east of Muzaffarpur by pucca road. The site lies on the right bank of the river Lekhandei and covers an extensive area of an ancient mound measuring about 50 acres.

\*\* The present article reflects the results of excavations conducted by the Directorate of Archaeology & Museums, Bihar under the supervision of its Director for five consecutive seasons between 1975 and 1980.

The author, who works on the staff of the Directorate, has been associated with the excavations of Katra.

1. A. Ghosh, *The City in Early Historical India*, pp. 13-14.

2. R. S. Sharma, *Light on Early Indian Society and Economy*, Bombay, 1966, p. 63.



After V. Gordon Childe, who prescribed ten criteria for distinguishing between urban and rural settlements, many other scholars such as Sjoberg, Levis Mumford, A. Ghosh, Y. D. Sharma, R. S. Sharma and others have explored and discussed the subject in fair depth. Several factors, taken together, are responsible for the origin and evolution of towns as well as for the transformation of a peasant-village community into urban one.<sup>1</sup> These may be listed as below—(a) surplus food production and its proper supply, (b) extensive and dense population with genuine community i.e., with the presence of public buildings along with drains, defence walls with watchtowers and gates, a common meeting place for the transaction of routine nature of commercial and political business, (c) diversity of occupation or craft specialization i.e., artisans, craftsmen, full time sculptors, painters, seal engravers to carve, model or draw according to conceptualized and sophisticated styles, (d) market and trade, in which the merchants and traders ought to have a corporate social life, (e) landlords, (f) administration, (g) religion, (h) secular tourism and (i) retainers.

A few other characteristics of towns have also been suggested by R. S. Sharma.<sup>2</sup> They constitute, for example the extensive and wide area of a particular site covering large and small mounds may suggest large population. The use of greater number of kiln-burnt brick structures in a planned manner may suggest well laid out town planning. Roads and streets consisting of paved or rammed bricks or otherwise may indicate busy traffic while the presence of drains may prove the existence of sewerage operation and municipal organization. Similarly the occurrence of coins may go to show the prevailing money economy as well as trade and commerce. The specialization in various crafts may be hinted by the habitation of artisans. The existence of river beside the excavated mound may supply evidence of navigation and the ringwells and tanks

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1. Kameshwar Prasad, "Was Chirand A Kushan Town", *Proceedings of the Indian History Congress*, Aligarh, 1975, p. 43.

Henceforth the abbreviated form of this source will be referred to as *PIHC*.

2. "Decay of the Gangetic Towns in Gupta and Post-Gupta Times", *PIHC* Muzaffarpur, 1972, p. 92.



drinking facilities to the merchants, caravan leaders and other passersby. Thus a site possessing the above mentioned features may be called a town or city.

Now, we shall have to examine, therefore, all these features with a view to ascertaining whether Katra, an important place in the district of Muzaffarpur in Bihar, was a town in ancient times. We shall examine this problem in the light of certain features of a town-site as described and suggested by different authorities above.

What passed through the eye of Sir Alexander Cunningham, the father of Indian archaeology as the biggest mound in the district of Muzaffarpur a century ago,<sup>1</sup> and what has been archaeologically operated by ceaseless effort of the Directorate of Archaeology & Museums, Bihar, has now unfolded itself as the site of a very fascinating and promising large town of Katra belonging to the 2nd century B. C.<sup>2</sup> Katra as well as other neighbouring villages abound in mounds of varying dimensions showing traces of old human habitations. The site since ancient times has been surrounded by two rivers, the Lakhandei which has been more or less a seasonal river and the Bagmati which has always been a perennial one flowing through Nepal and north Bihar. The latter once flowed about 2 kms. south of Katra, but now flows just beside it and swells up further by joining the Lakhandei at about a quarter kilometer north of the main mound. These rivers served the purpose of navigation and thus facilitated trade and commerce in ancient times, which is an essential ingredient for the growth of towns.

Besides being situated at the confluence of these two rivers, Katra has also been surrounded with several other navigable rivers and criss-crossed by roads through the ages. Extensive surveys and archaeological explorations of the area made till now have laid bare the traces of few ancient roads<sup>3</sup> which also served as trade routes. This area is further

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1. Cunningham, *Archaeological Survey of India Report*, Reprint 1969, p. 35.

2. K. K. Sharma, "The Hoary Antiquity of Katra", *The Indian Nation*, July 22, 1979, p. 7.

3. Explorations of the area showed the traces of centuries-old roads which are still traceable in its locality, one of which is at a distance of 2 kms. to the south



dotted with many large and small tanks<sup>1</sup> whose waters were not only used for irrigation but drinking purpose as well. There are a good number of mounds<sup>2</sup> of large and medium sizes, [all falling within the radius of about 24 kms., which yielded various types of antiquities, remains of ringwells and few burnt brick structures all belonging to early historic period. The existence of these mounds and tanks in and around Katra show extensive habitation in the days of yore.

Archaeological excavations conducted so far at Katra by the Directorate of Archaeology and Museums, Bihar have yielded not only a series of structural remains of the Post-Mauryan period but also a large number of other antiquities associated with them. They have brought to light the remains of a huge fort reflecting most of the architectural aspects of the defences and other structures.<sup>3</sup> Although the complete layout of the structures was not exposed because of the limited extent of the digging, interesting pieces of evidence in this respect were not lacking. Massive defence walls consisting of kiln-burnt bricks were raised along the periphery of the mound in alignment with the course of the river, apparently to protect the settlement as much from human onslaughts as from the ravages of floods.

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of Katra. The height and even the width of this road can be seen from Bhutane to Rampurhari (some 12 kms. long), situated at a distance of about 9 kms. west of Katra.

1. Such tanks are represented by Dighi, Kurminia, Bareba, Jankali, Panpibi, Kukurdhari, south from Katra, Dhanserah, Dighia, Sadhaba, Birbitana, Ararahia, Dhangaraha, Chandah, Belhi to the west of Katra. Besides, other ponds are located at Rajadih, Deogan, Bagaha, Sadhava, Bokaha, Jasmati, Bharpوريا, Basghati, Khangura and Hajokhar.
2. Among the various mounds in the locality mention may be made of Survindadih, Jhauridih, Chāndahadih, Kushidih, Basantdi, Marbadih, Kodaidih etc. Besides, the mounds of Singhwada, Bhada, Dhanwara and Katai deserve special mention.

One trench measuring 10 m. × 5 m. was laid out on the Chandahadih, about 3 kms. north-west of Katra main mound which yielded material remains of early historic period.

3. Reports of excavations conducted at Katra during the five consecutive seasons (1975-80) have been sent for publication in the *Indian Archaeology—A Review*.



Archaeological operations hitherto carried out have further revealed that Katragarh was in a prosperous condition during the Sunga period, and also to some extent during the post-Sunga period. Fairly good remains of the fortification walls in several courses were exposed in the trenches laid out on the rampart. So far the rampart showed its three phases of which the earliest one was made of solid burnt bricks having uniform sizes, measuring  $40 \times 27 \times 7$  cm. A brick-paved drain was also added outside the fortification wall connected with the inside of the fort for the purpose of draining out the refuse water from a sizeable interior of the fort. In phase II, defences consisted of massive rampart made of mud clod, the digging of which left a moat around the garh. The slanting defence wall of the third phase; 2.60 to 3 metres wide, was raised of bricks measuring  $50 \times 30 \times 8$  cm. It would be worthwhile to note that the archaeological operations at the site have also revealed the ruining of watchtowers. The cuttings of the south-western corner yielded a very interesting structural evidence of a stair-case having 26 flight of steps. Mud at every stage was used as mortar and bricks were laid in alternative rows of headers and stretchers. All the three phases of the rampart may be dated to the Sunga period on the basis of the stratigraphy of the site and the antiquities unearthed from the strata associated with them. The early defence wall might have lost their existence due to recurrent floods and the latter as a result of the removal of bricks by pilferers during the period under review.

Trenches laid out inside the fort also revealed other associated burnt-brick structures belonging to the Sunga and Kusana periods. These buildings seem to have been used as residences of the contemporary inhabitants. However, structures belonging to the uppermost level of the site invariably made of brick-bats, projected the impoverished state of the people residing inside the fort. They possibly had tiled roofs as evidenced by broken tiles obtained in local contemporary debris. Thus on the whole the material remains obtained from Katra display urbanization at its peak. To quote Y. D. Sharma, "In India, till recently the existence of kiln-burnt brick houses distinguished the town from the village, and this could serve as a yardstick even in classifying older habitations."<sup>1</sup>

1. 'Early Historical Cities', *Archaeological Remains, Monuments And Museums*, New Delhi, 1964, p. 44.



The existence of town at Katra could also be discerned from the fact that in the course of a kaccha road construction there under the Bihar Government's "food for work programme" in the year 1979, the traces of ancient drains were accidentally found. A huge drain-pipe<sup>1</sup> constructed of four burnt bricks and forming a circular hole was suddenly exposed and brought to our notice. Obviously extensive urban habitation or municipal area such a Katra was equipped with a network of sewers that were constructed to carry off sewage, a fact which is also supported by the discovery of several drain-pipes of baked clay interlocked with each other and connected with the main drainage system during our archaeological operations which involved cleaning work at that site. Moreover, this single piece of brick-built pipe provides evidence of a marvellous engineering skill of the architects during the early historic period, which saw the growth of urban centres and mercantile activities on a considerable scale. It may, therefore, be regarded as a unique discovery in the field of Indian archaeology. Besides, the remains of a number of ringwells<sup>2</sup> and pottery paved floors have also been noticed.

It is noteworthy that we come across various aspects of fortification (prakara) and moat (parikha) in early Indian literature such as *Arthasastra*.<sup>3</sup> At the same time such evidences have also been revealed as a result of archaeological diggings from a number of sites in northern India, such as Kausambi, Eran, Ujjain, Ahicchatra, Sisupalgarh, Rajghat,

1. It seems to be public sanitary arrangements and not the internal arrangements attached to individual houses.
2. Evidences of ringwells are common at the Northern Black polished Ware levels and current even in latter times. A good number of ringwells found at Katra in close proximity may indicate their inside rooms occurrence as privies apart from the purpose of soakage.
3. References of ancient Indian forts have been found in literature. In Kautilya's *Arthasastra* there is a chapter on "Durga Vidhanam" or construction of forts. See for details R. Shamasastry, *Kautilya's Arthasastra*, Mysore, 1923, BK. II. It has been further annotated in Sanskrit by Mahamahopadhyaya T. Ganapati Sastri (Trivandrum, 1924). A Three-volume comprehensive study on the subject has been further made by R.P. Kangle. See *THE KAUTILYA ARTHASASTRA*, Bombay, 1960.



Rajgir, Sravasti etc.<sup>1</sup> Beside, the archaeological excavations at Vaisali; the well-known and much talked about capital city of the Lichchavis at Buddha's time in the modern district of the same name in north Bihar, three successive defence walls have been encountered. The earliest one was made of bricks, second of mud and the third of bricks. They have been dated respectively to the 2nd century B. C., and 1st century B. C. and 1st century A. D. and 2nd century A. D. or later.<sup>2</sup> The defence walls unearthed at Vaisali and Katra in the same cultural zone of north Bihar resemble each other a great deal.

The finds discovered at Katra go to suggest the existence of a number of crafts. Ceramic industry, stone industry, bone industry, metallic industry, terracottas, etc., deserve special attention. However, the ceramic industry was the most important one. It was mainly plain, utilitarian and purely domestic in purpose. The whole range of pottery was generally wheel thrown. The fabric varies from coarse to medium. The important types include vase, vessel, handi (both carinated and corrugated), rimless handi, basin, lid-cum-bowl, big jar, tub, spout (a few bearing decoration), karahi and other miniature pots etc. The potsherds unearthed from Katra throw conspicuous light on the food habits of the people as some of these pots could be used as table wares while others as cooking pots and storage jars. The occurrence of a large number of pots with varying shapes go to show the advance cultural life of the inhabitants as well as an indicative of thick population spread in a vast area. To meet the demands of such a vast majority of people the services of skilled and specialized potters must have been needed.

The existence of stone industry is represented by stone balls, bangles, quern and pestles, weights, rotary quern, etc. But the discovery of beads made of semi-precious stones such as agate, jasper, crystal, chalcedony, carnelian, lapislazuli, etc. are by far the most important among all. Besides, etched beads have also been unearthed from the site. All these specimens point to the fact that their manufacture requir-

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1. A. Ghosh, *op. cit.*, pp. 62-65.

2. B. P. Sinha and Sita Ram Roy, *Vaisali Excavations*, 1958-62, Patna, 1969, pp. 5 and 6.



ed specialized and skilled labour. The existence of bead-making industry is further attested by the occurrence of few unfinished stone beads. The raw materials for the manufacture of various stone and precious stone objects were not readily available in the Gangetic plains of north Bihar in and around Katra. Most probably they were brought from the Chhotanagpur region of south Bihar or elsewhere.

Excavations have brought to light the evidence of bone industry also. Objects of bone, shell, horn and ivory were also picked up such as antimony rods, bangles, beads, styluses, pins, arrowheads, etc. The discovery of bone pins comparatively in large numbers deserve mention.

The developed knowledge of metallurgy is also attested by the discovery of objects made of both copper and iron. Antimony rods, bangles, earrings, javellin, bowl of copper and dagger, nail, sword, spear of iron are noteworthy. Besides, the discovery of iron slags, a waste product of iron smelting industry, in good numbers also show the iron-melting technology. At the same time the slag samples cut from the artifacts revealed the *modus operandi* of the smelter. It is interesting to note here that none of these metals is indigenous to the region. Most probably they have been borrowed from Chhotanagpur region of south Bihar. Besides, the minor miscellaneous objects obtained which are represented by uninscribed copper cast coins, one inscribed Huviska gold coin and a few terracotta sealings bearing only symbols. This shows the existence of money economy and sealing engravings.

The terracotta plaques, human as well as animal figurines, decorative pieces, play objects, skin-rubbers, beads, dabbers, etc. throw interesting light on the artistic activities of the people. The terracotta human figurines are sensitively modelled containing disciplined lines, contours, gradation of plans, better regulated, heavily coiffured, elaborate jewellery and dress. The female figures depicted on plaques or otherwise have been shown bearing sari and skirt while the breasts are made in naturalistic way having the spontaneous development out of the flesh of the body. The terracotta animal and bird figures represented in the form of toys and toy-carts. The representation of terracotta skin-rubbers with some convex shaped having grooves, square as well as boat shaped etc. are also noteworthy.



Very few of them show geometrical designs. Besides, terracotta decorative wheels with prominent hub and spokes, earlobes, bangles, corn-rubbers are also among the important finds. Among beads pear shaped, ghata-shaped, drum shaped, arecanut type, barrel-shaped have also been discovered from the site showing specialization in various crafts. At the same time the discovery of terracotta naga figurines, humped balls, mother Goddess and other ceremonial deities suggest the religious life of the people. The people must have worshipped these deities.

The cuttings inside the fort revealed below the Sunga level a cultural deposit represented by the NBP Ware. The digging in only two trenches yielded Mauryan terracotta figurines, beads of semi-precious stones, and other minor antiquities such as bone pins and styli and copper antimony rod in the assemblage of the sherds of the NBP Ware and other associated ceramics. Although we could not dig below the Sunga level in all the remaining trenches owing to the preserve of the sub-soil water, a few Mauryan antiquities, represented by profusely ornamented terracotta human figurines and animal figurines bearing engraved symbols of sun and leaf, were picked up from the disturbed upper strata.

Thus the excavations carried out at Katragarh so far leave no room for doubt that it was a flourishing town in Sunga and post-Sunga times. This was a period of flourishing trade between India and the outside world which contributed immensely to the growth of towns and mercantile activity in the different parts of the country on an unprecedented scale. This period is also marked by the development and diversification of dozens of crafts which gave an impetus to trade and industry.<sup>1</sup> It was against this background that like many urban centres of this period that have come to light in large numbers recently including that of Chandraketugarh in West Bengal, Katra also developed into an urban centre during the Maurya-Sunga period. We have all the ingredients of a town, as enumerated in the beginning of this paper, which have been exposed at Katra. The encouraging results of the excavations have opened up new vistas of further excavations at nearby regions around Katra that eagerly await archaeologists' spades.

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1. Rajeshwar Prasad Singh, "Artisans in *Manu*", *PIHC*, (32nd Session, Jabalpur, 1970), p. 103.



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